

# Rapid Deployment Flood Control System

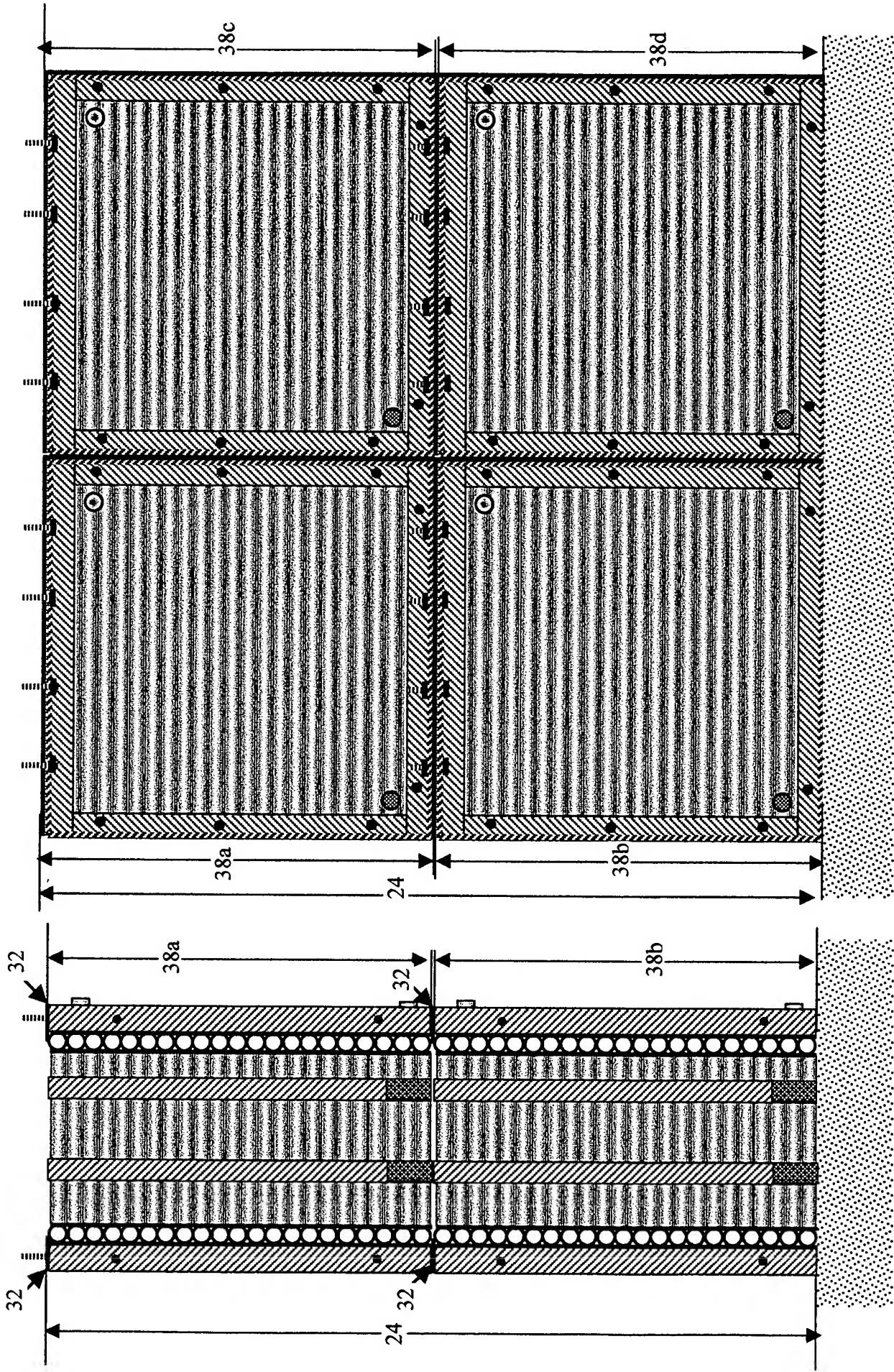


Figure 1 Side View Of Double Stacked Units

Figure 2 Front View Of Double Stacked Units

# Rapid Deployment Flood Control System

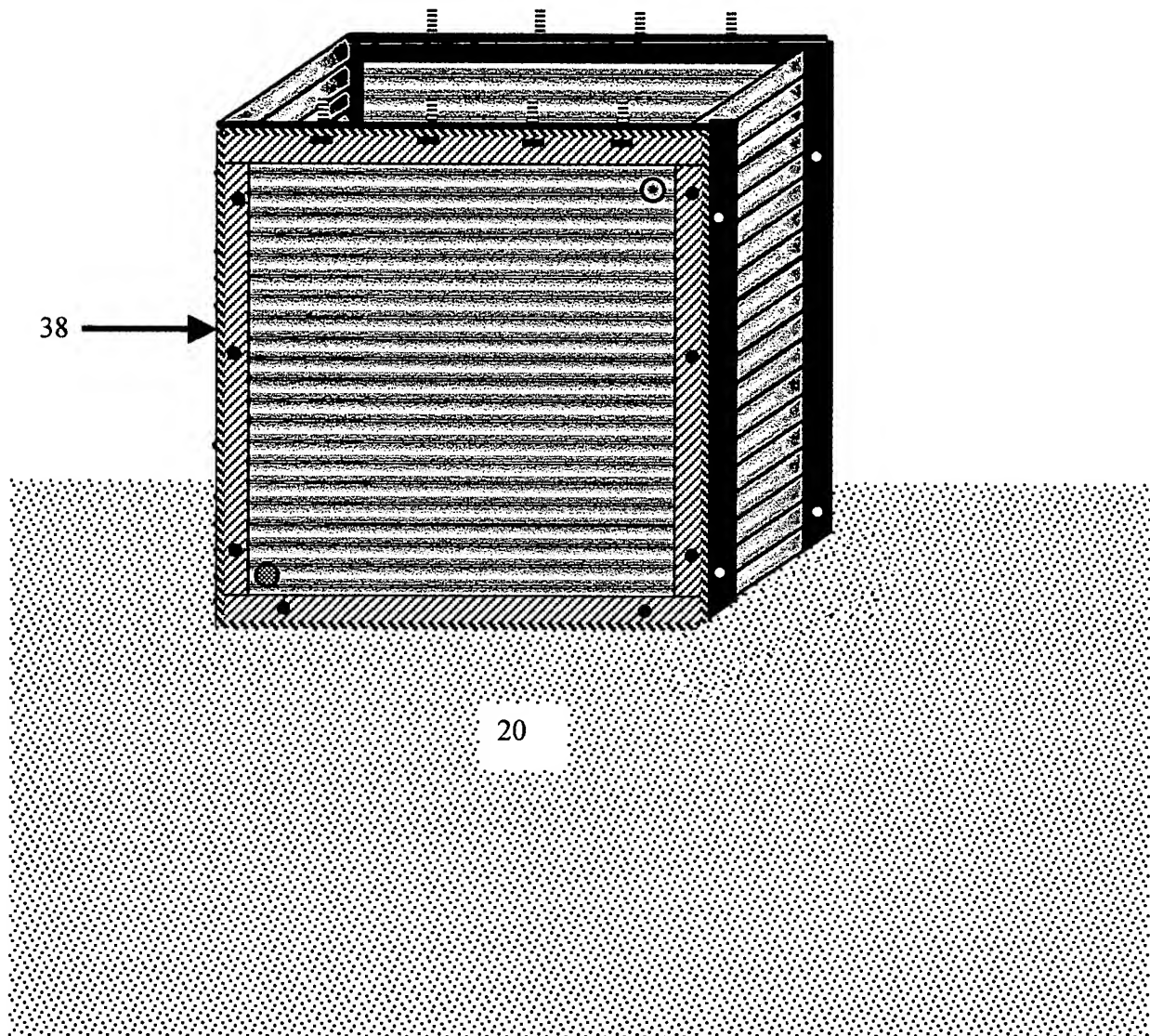


Figure 3 3-Dimensional View Of Unit

# Rapid Deployment Flood Control System

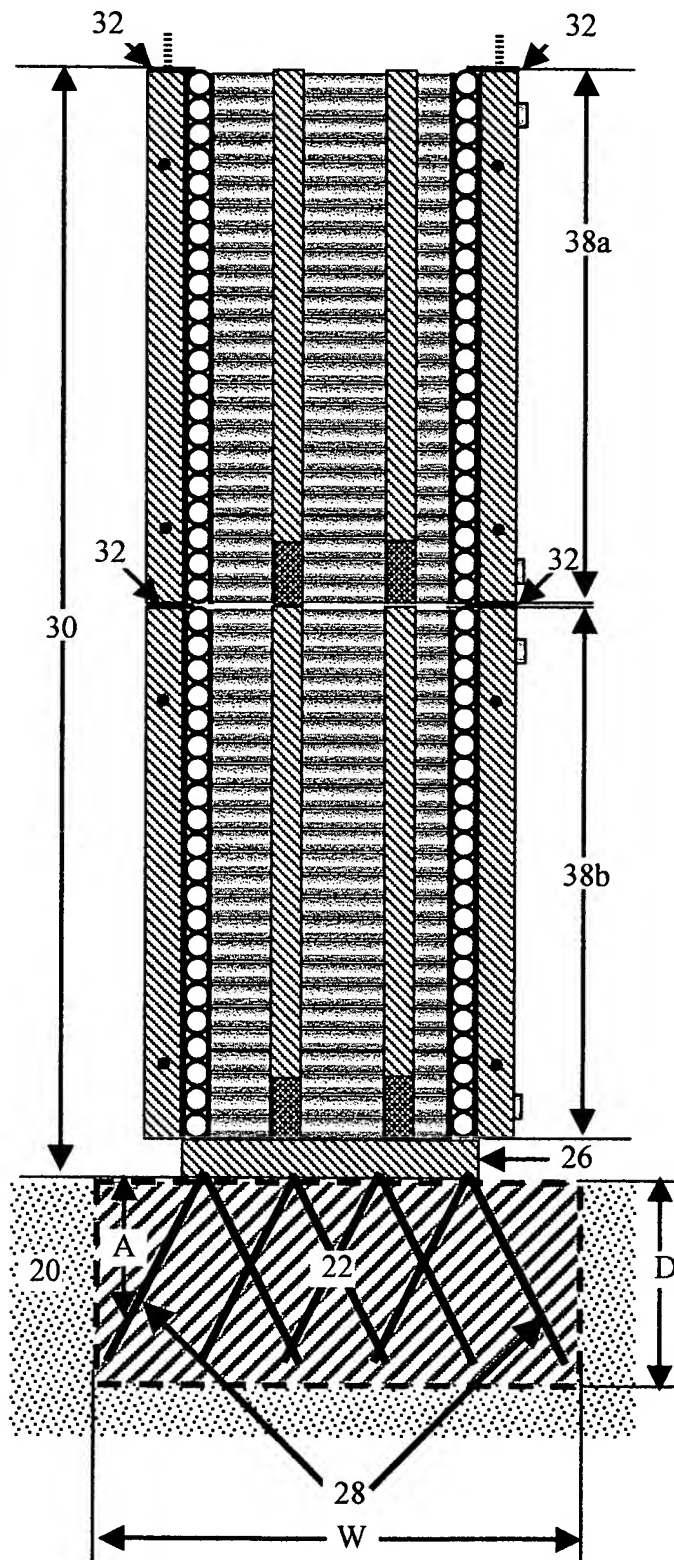


Figure 4 Side View Of Anchored Double Stacked Units

Figure 1 is a schematic diagram of a cross-section of a multi-layered structure. The structure consists of a top layer (20) with a thickness of 30, a middle layer (22) with a thickness of 20, and a bottom layer (28) with a thickness of 20. The middle layer (22) is divided into four quadrants by a vertical and a horizontal line. The top layer (20) is divided into four quadrants by a vertical and a horizontal line. The bottom layer (28) is divided into four quadrants by a vertical and a horizontal line. The total width is labeled L. Various dimensions are labeled: 38a, 38b, 38c, 38d for the top layer; 26a, 26b for the middle layer; and 20 for the bottom layer. Arrows indicate forces or stresses acting on the layers.

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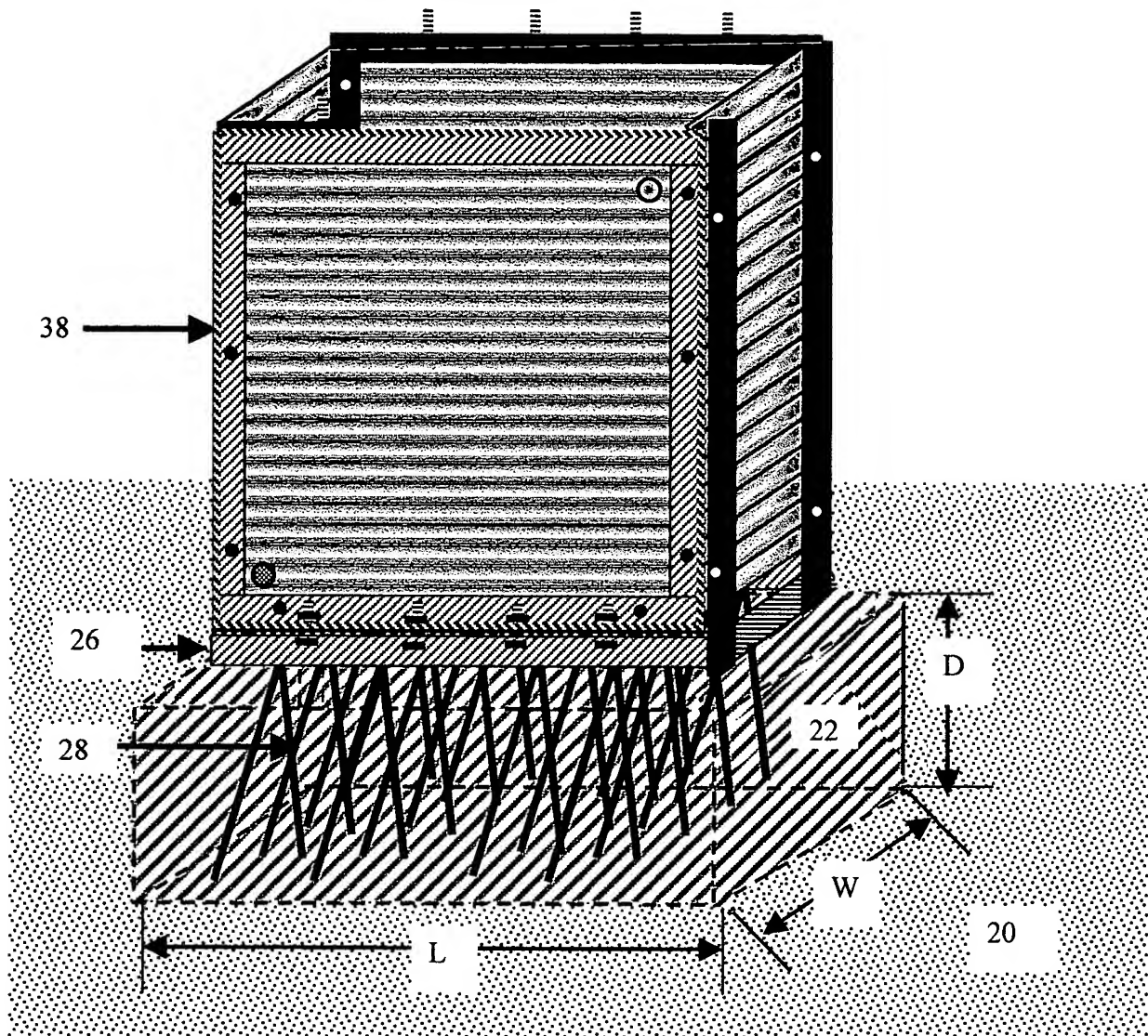


Figure 6     3-Dimensional View Of Anchored Attached Unit

By calculating the size or volume of the foundation the weight of it can then be determined. The size or volume of the foundation **22** can be calculated in cu. ft by multiplying the width  $w$  the depth times the length ( $W \times D \times L$ ). Multiplying the size (cu. ft.) of the foundation **22** by the weight of a cu. ft. of water times the density of the surface **20** the weight  $W_F$  of the foundation can be calculated.

For example, given the width of the foundation **22** is 2 ft., the depth is 1.5 ft., and the length is 500 ft. then the size of the foundation is 1500 cu. ft. The weight of a cu. ft of water is approximately 63.73 pounds per cu. ft. and if the density of the surface **20** is 1.1 then the weight  $W_F$  of the foundation is equal to 1500 cu. ft. X 63.73 pounds per cu. ft. X 1.1 or 105,154.5 pounds or 52.6 tons

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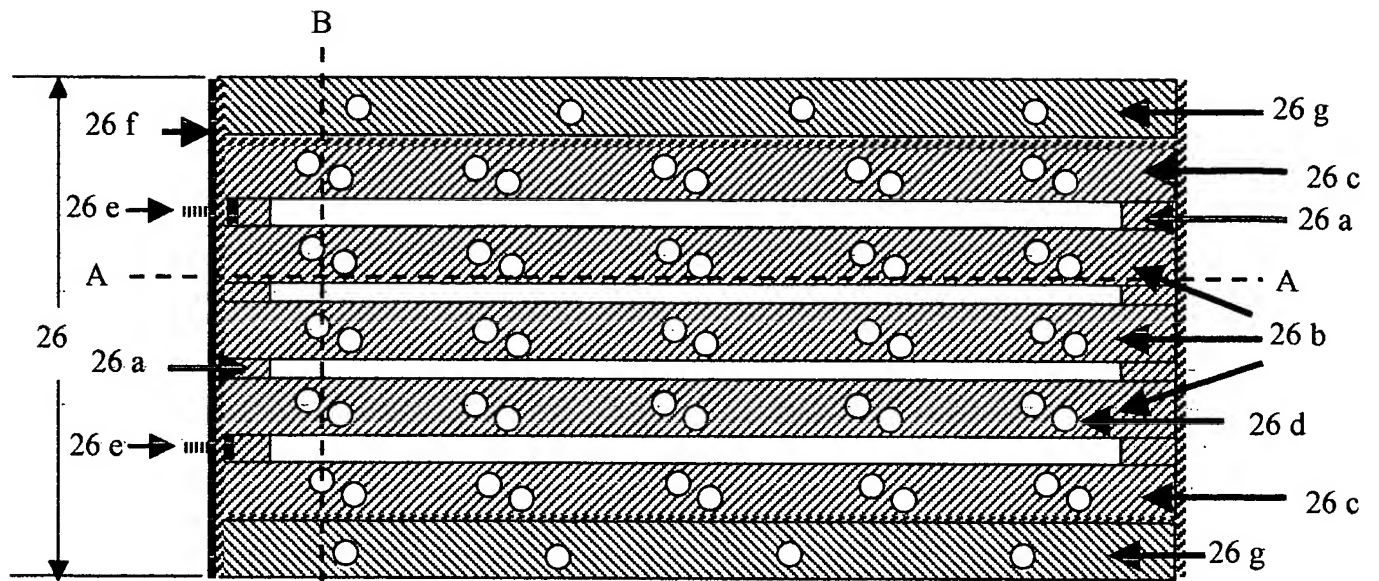


Figure 7 Overhead View Of Base



Figure 8 Front View Base

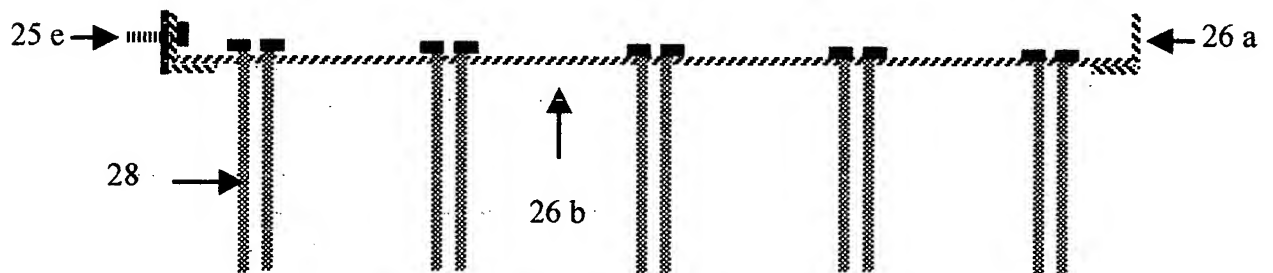


Figure 9 Cross Sectional Front View Of Base

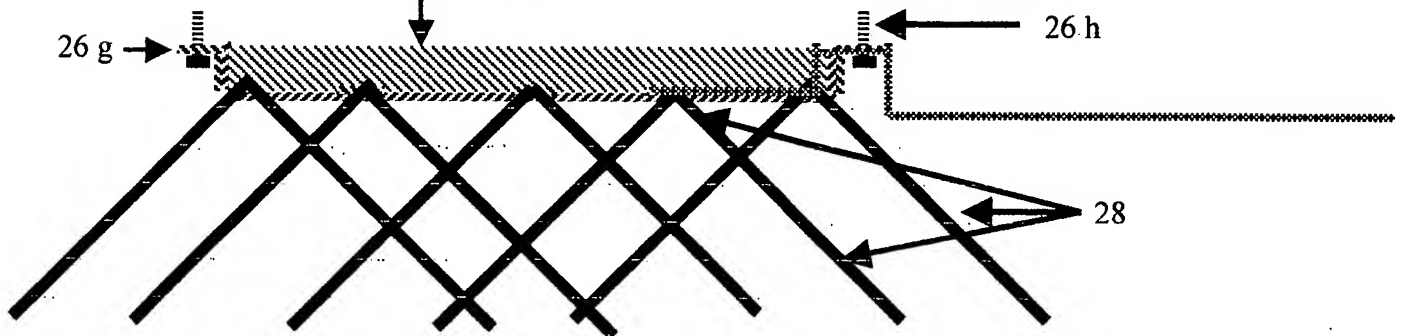


Figure 10 Cross Sectional Side View Of Base.

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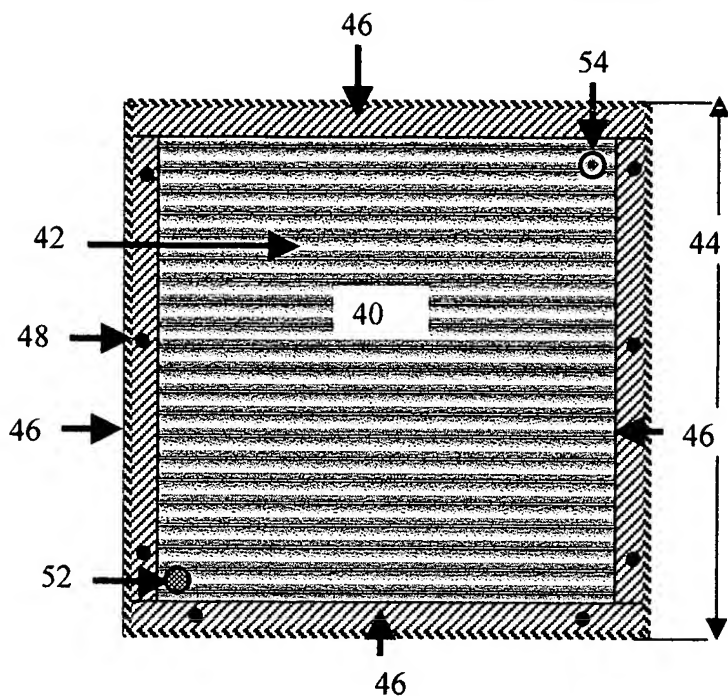


Figure 11 Front View Of Front Side Wall

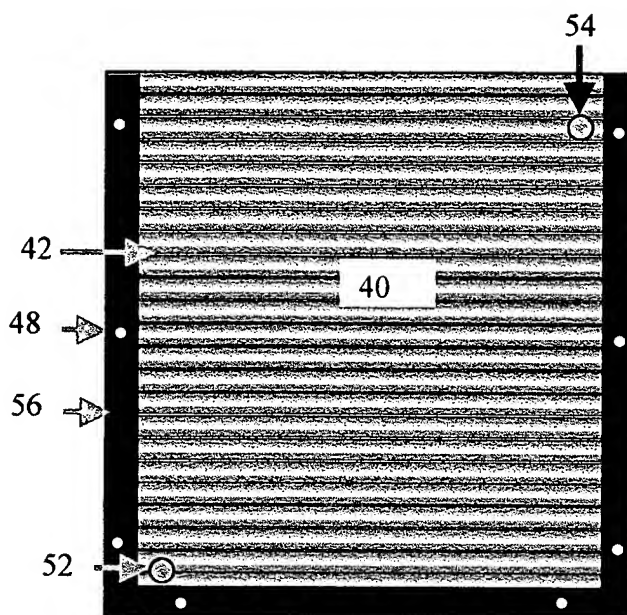


Figure 12 Rear View of Front Sidewall

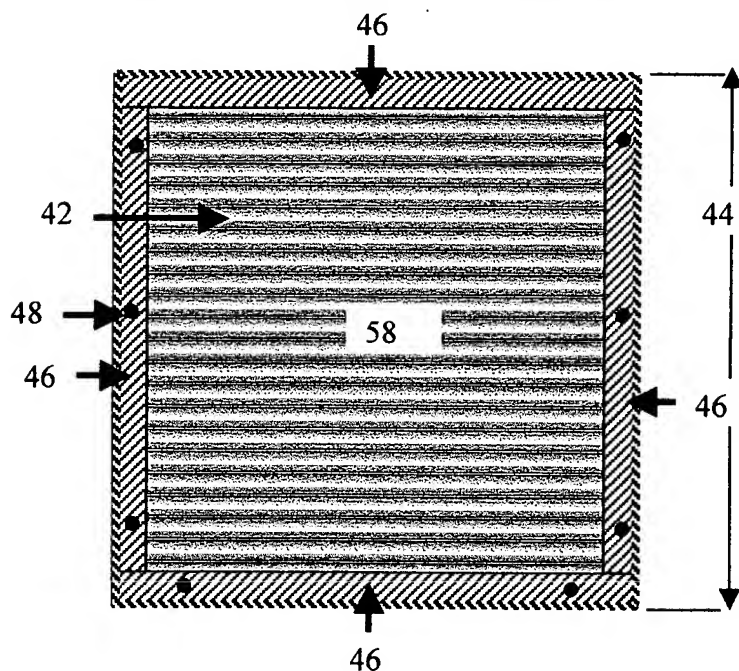


Figure 13 Outside View of Back Sidewall

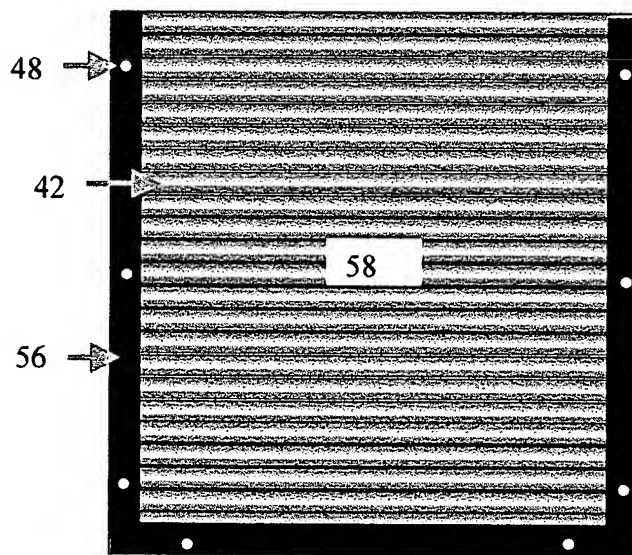


Figure 14 Inside View of Back Sidewall

# Rapid Deployment Flood Control System

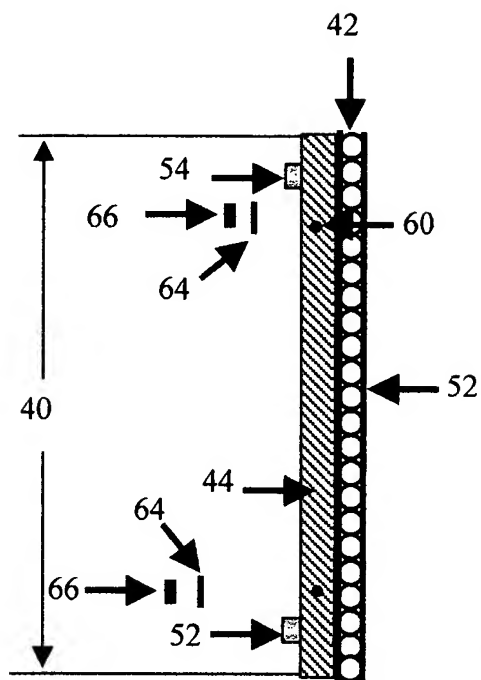


Figure 15 Side View of Front Sidewall

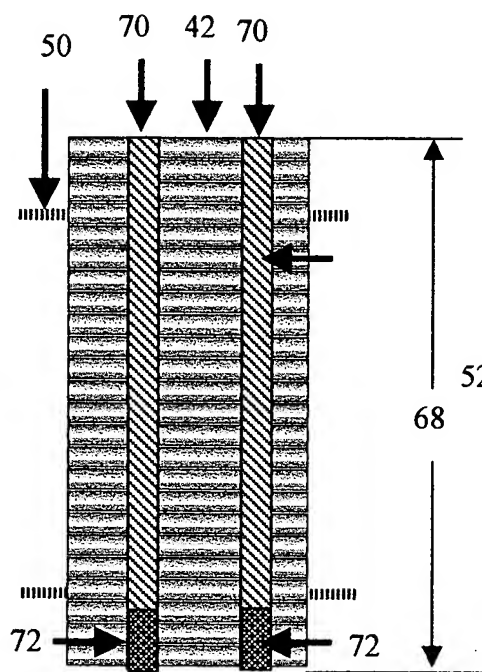


Figure 16 Side View of End Panel

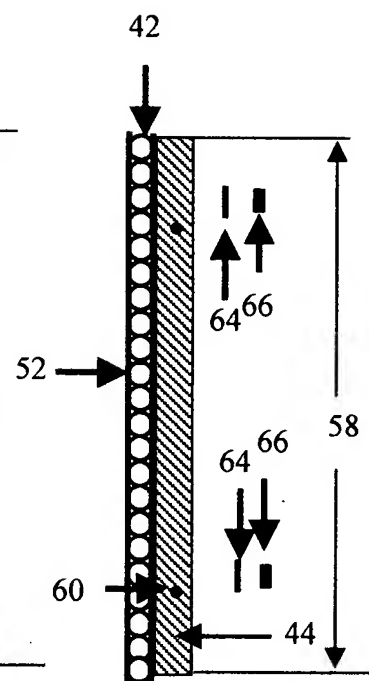


Figure 17 Side View of Rear Sidewall

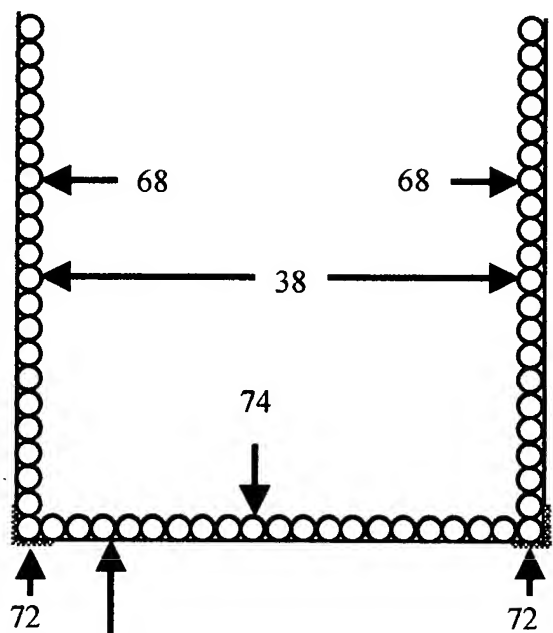


Figure 18 Erected Cross Sectional View Of End Panels And Bottom Panel

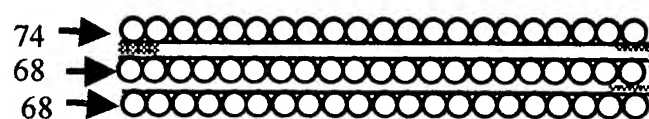


Figure 19 Cross Sectional View Of End Panels And Bottom Panel Folded Into Shipping and Storage Position

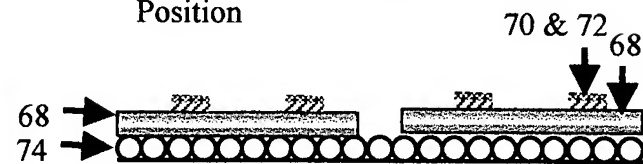


Figure 20 Cross Sectional View Of Bottom Panel And Top View of End Panels Packed For Shipping and Storage



Rapid Deployment Flood Control System

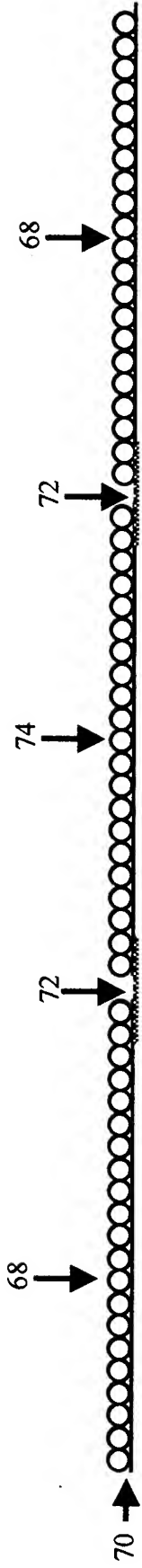


Figure 21 Unfolded Cross Sectional View Of End Panels And Bottom Panel

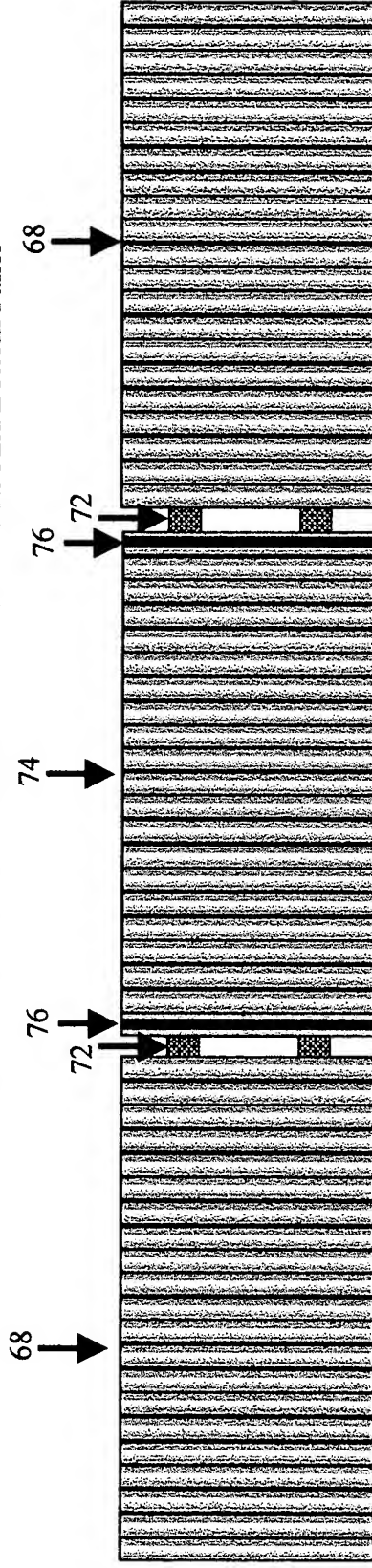


Figure 22 Overhead View Of Unfolded End Panels And Bottom Panel

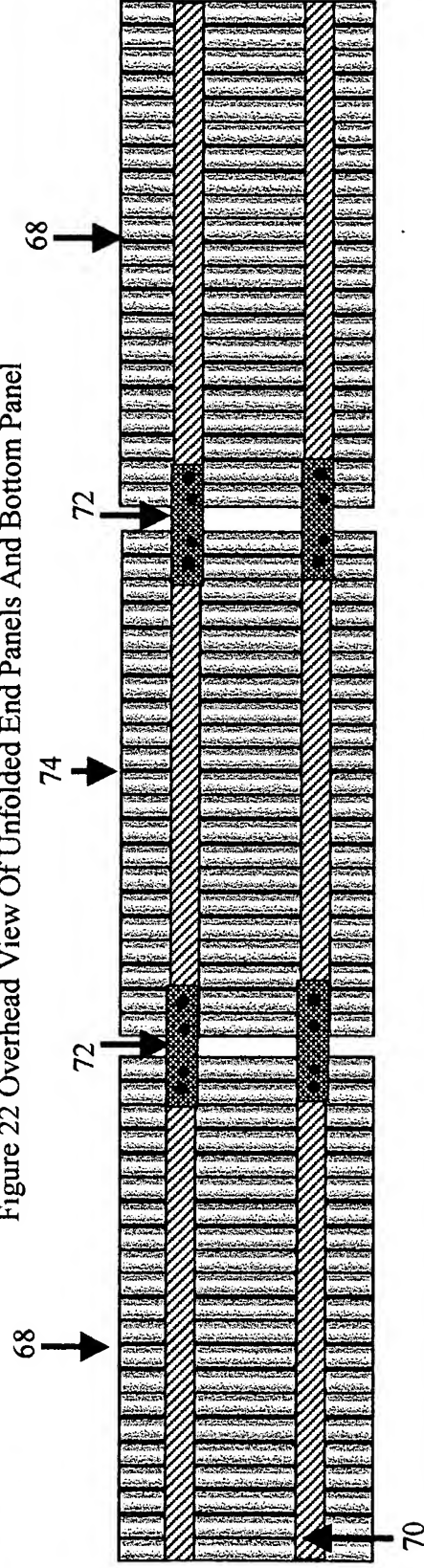


Figure 23 Bottom View Of Unfolded End Panels And Bottom Panel

# Rapid Deployment Flood Control System

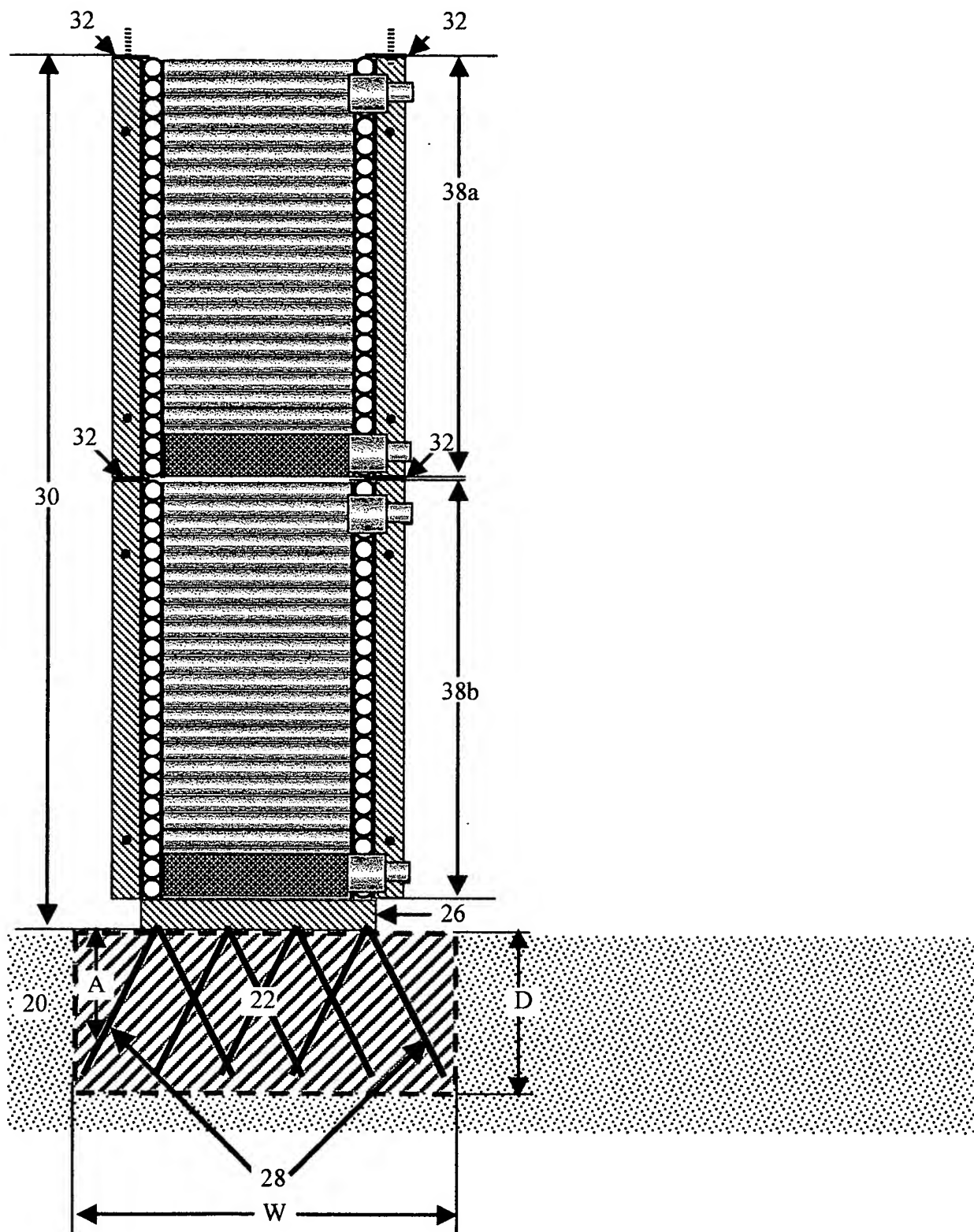


Figure 4 Side View Of Anchored Double Stacked Units

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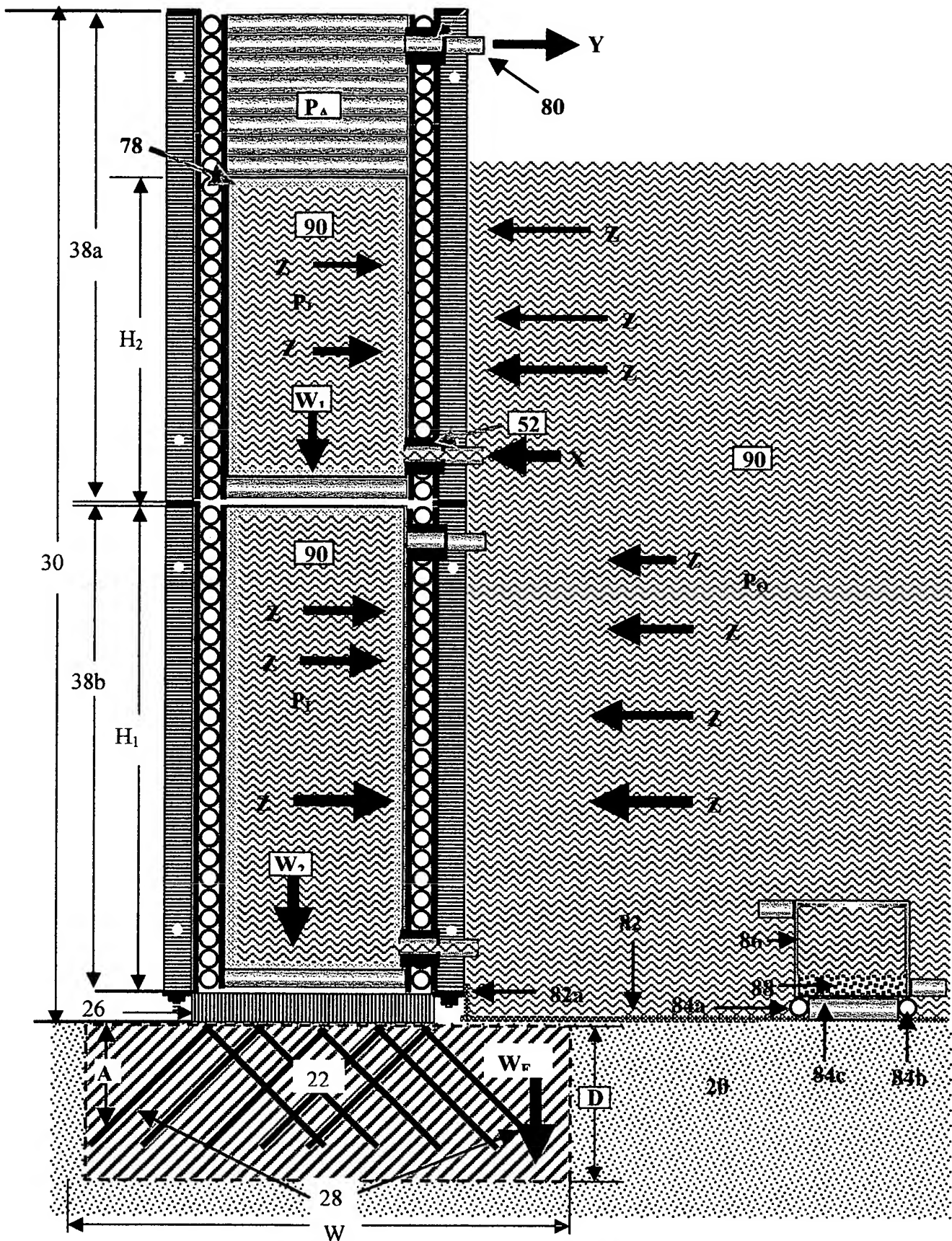


Figure 25 Cross Sectional View Of Anchored Double Stacked Units Water Filled Bladders



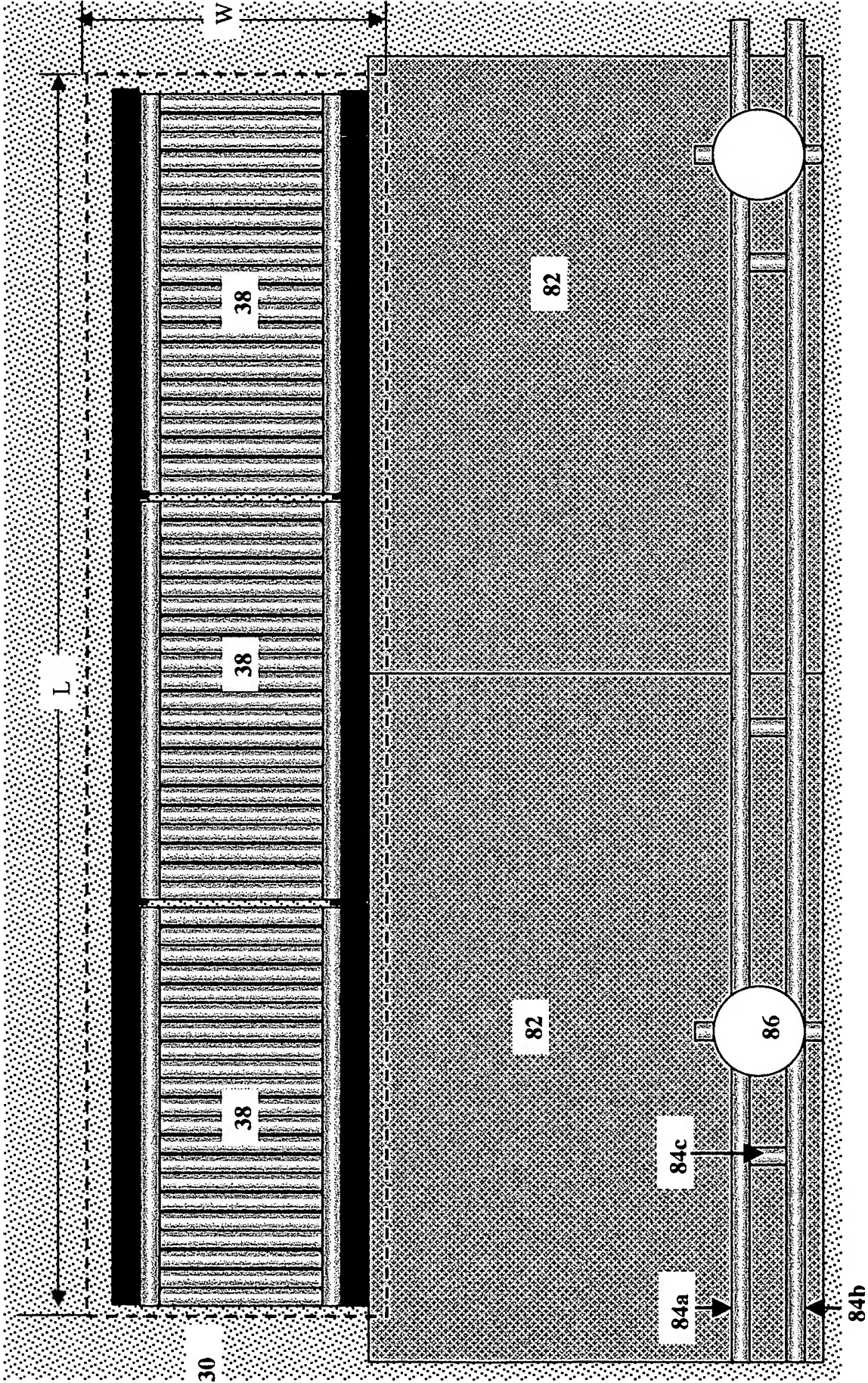


Figure 26 Overhead View Of Empty Joined Units With Skirt



## Rapid Deployment Flood Control System

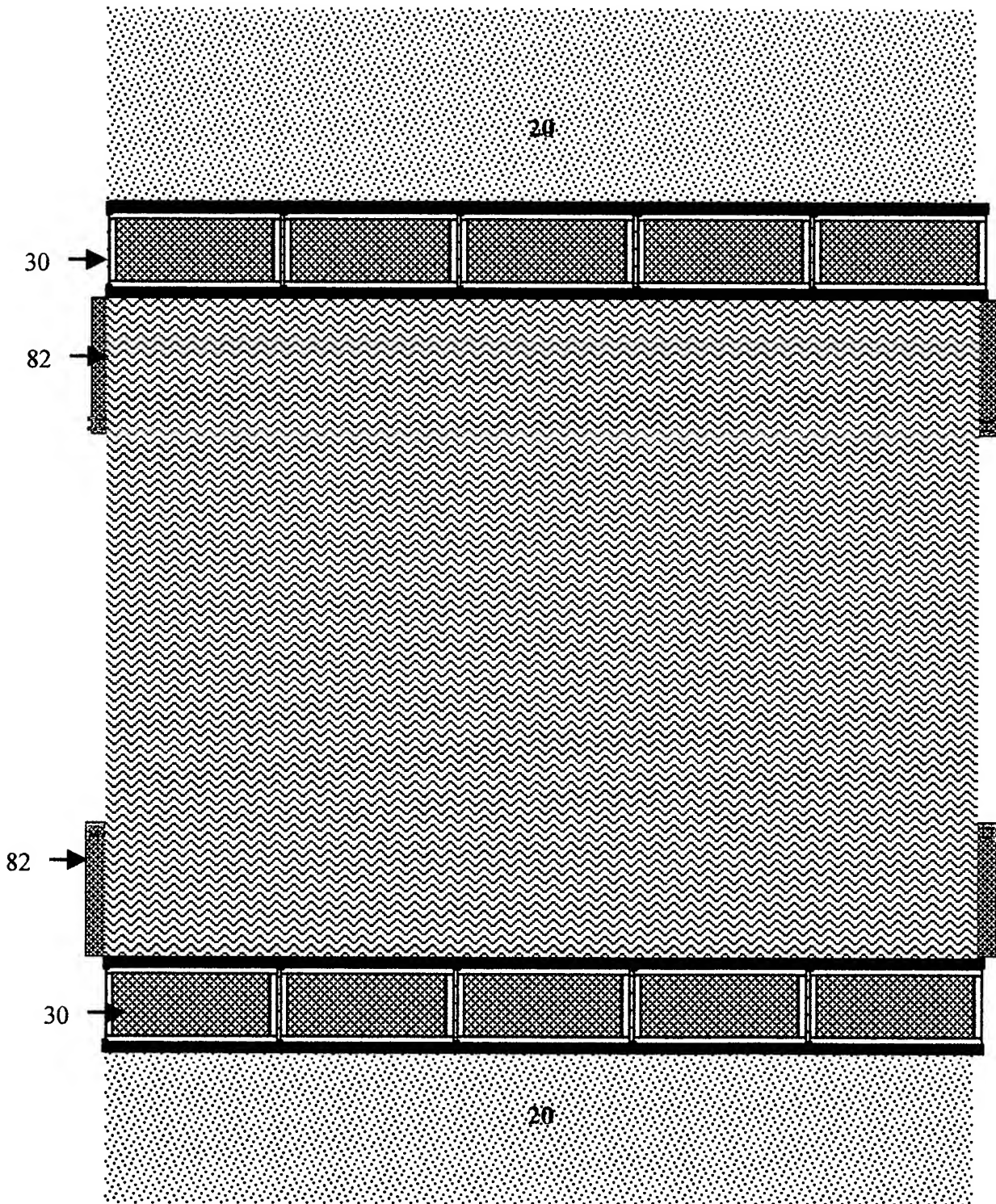


Figure 27 Flood Control Channel

## Rapid Deployment Flood Control System

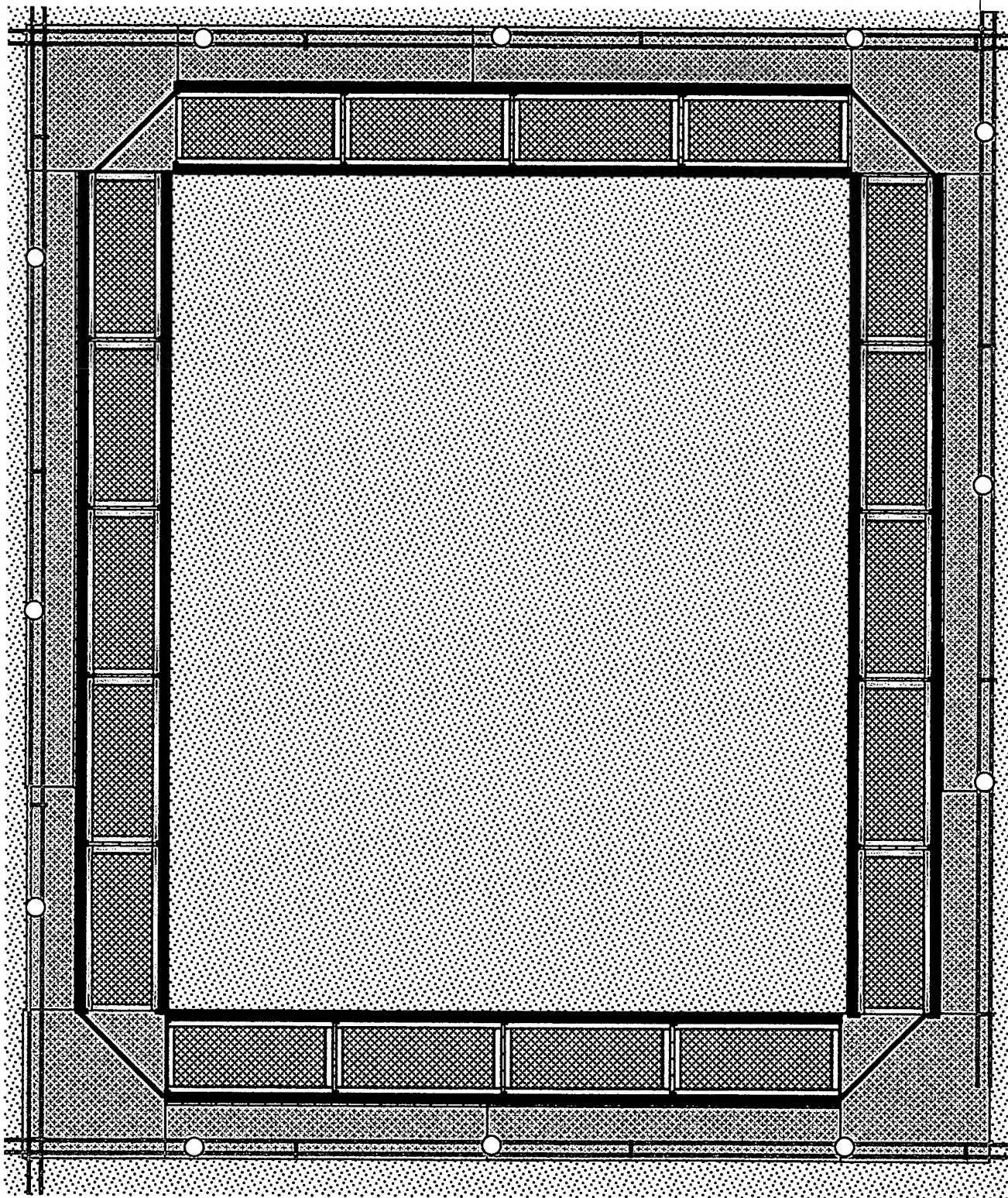


Figure 28 Protected Enclosed Area

# Rapid Deployment Flood Control System

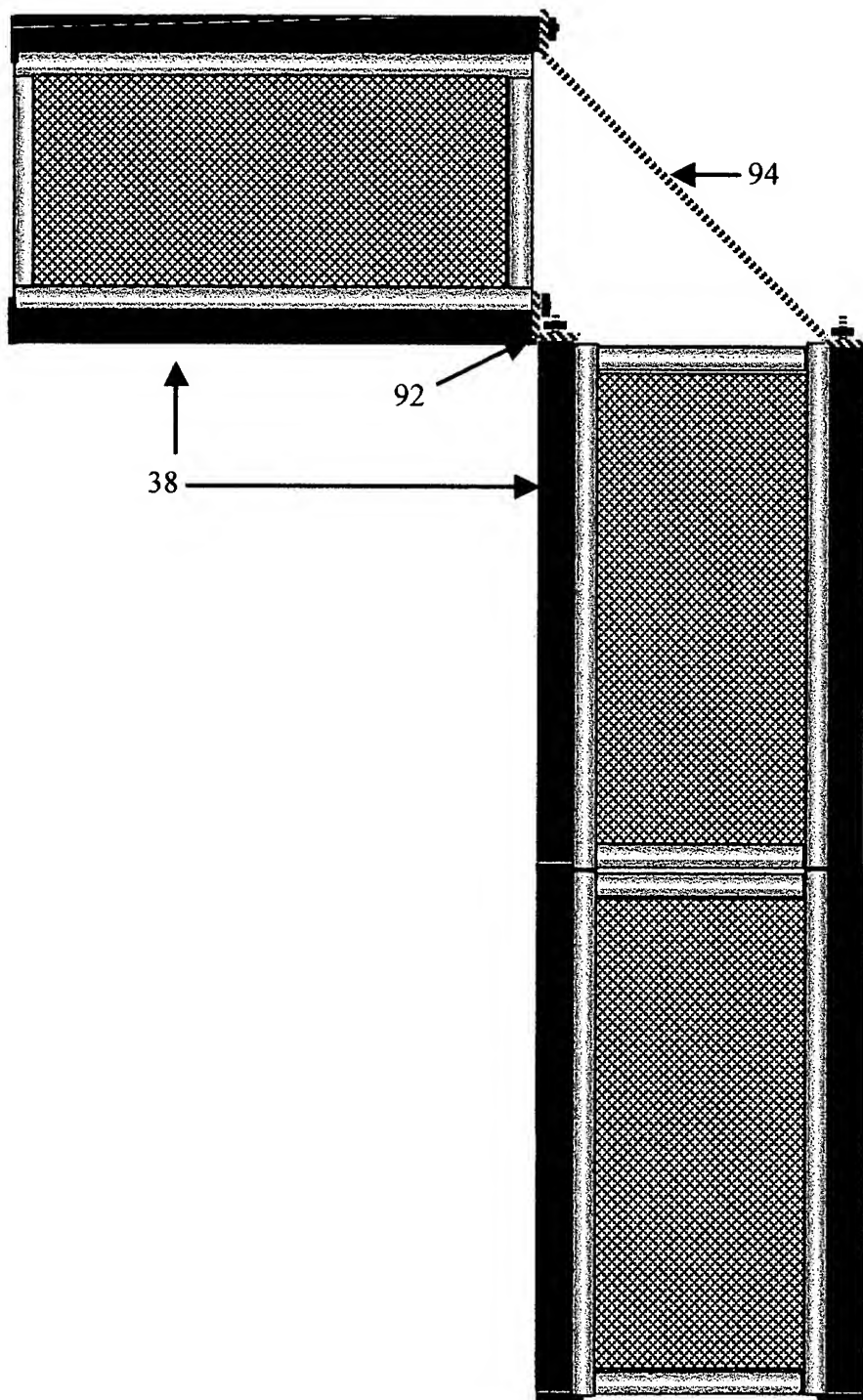


Figure 29 Overhead View of Joined Units At 90° Angle

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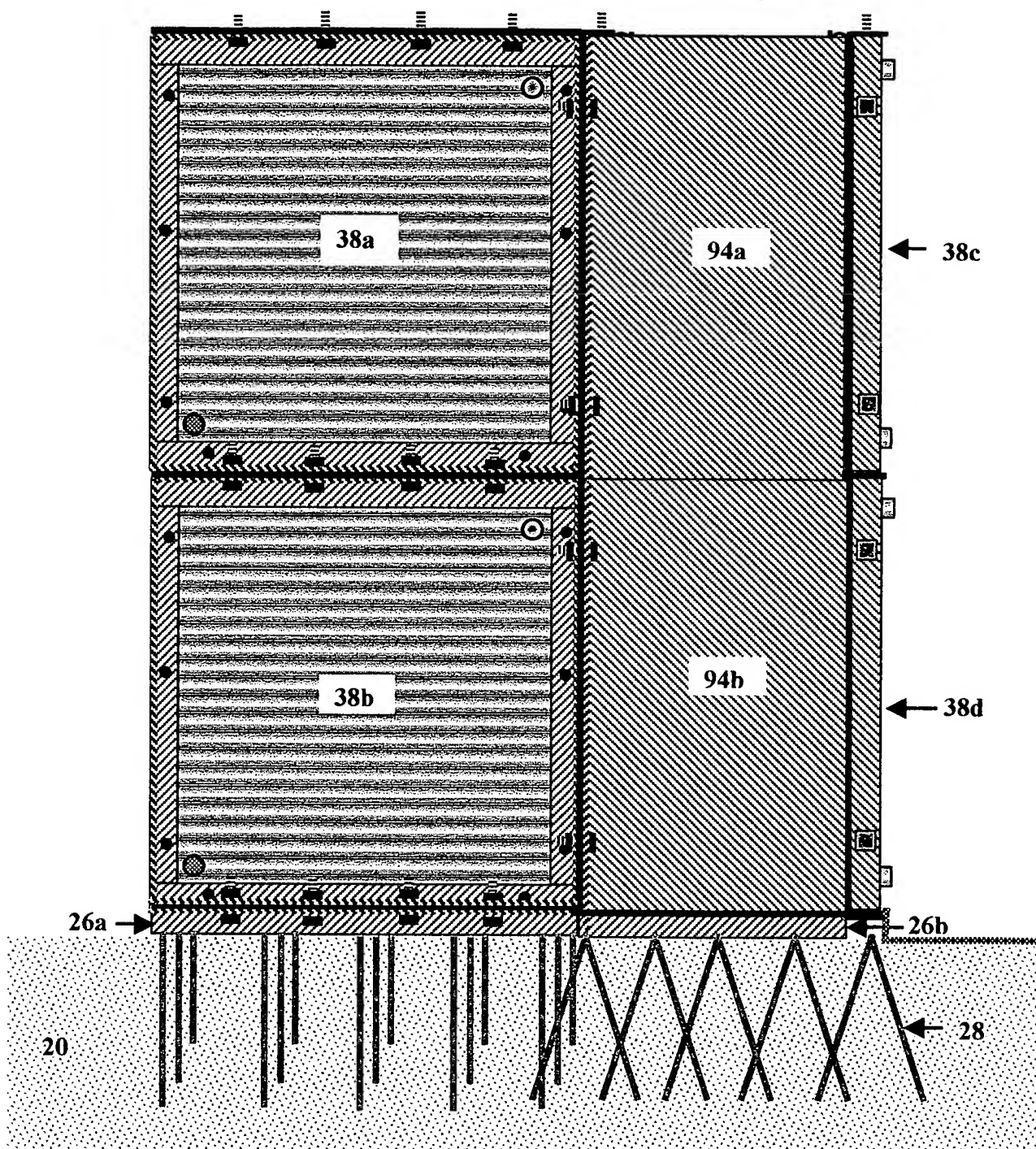


Figure 30 Front View Anchored Flood Control System Joined At Right Angle



## Rapid Deployment Flood Control System

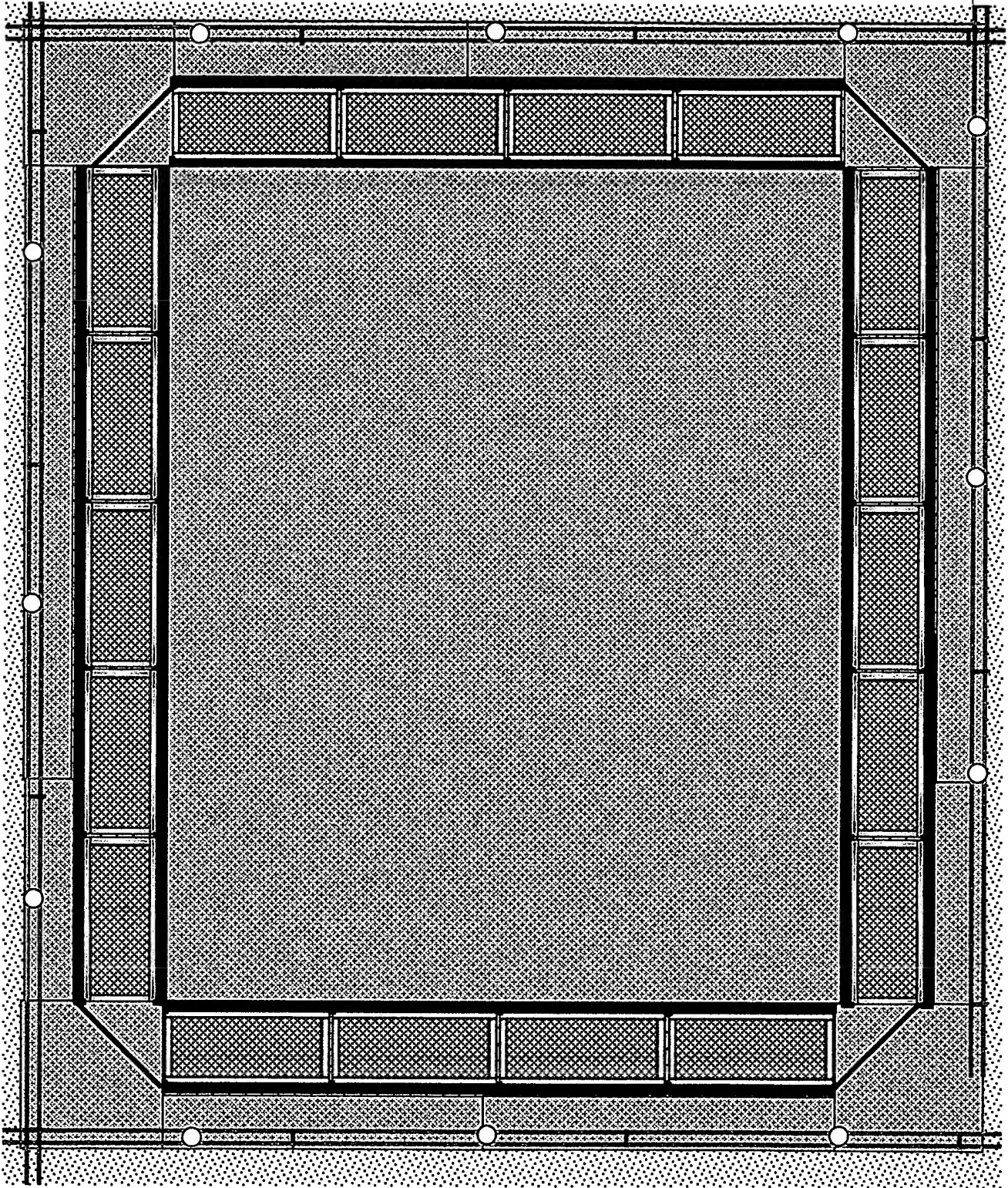


Figure 31 Storage Tank